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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	**Applicant(s)**
	10/579,950	BUCHNER ET AL.
Office Action Summary	**Examiner**	**Art Unit**	
	ANTHONY MEJIA	2451	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
> Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy of PCT/EP04/53045 has been filed.

Response to Amendment

2.   It is acknowledged that Claims 1-10 have been cancelled. Claims 11 and

16 have been amended, and Claims 21-25 have been added and are pending in

this application.

3.   Amendment to the objection in response to examiner's objection to Claims

11-15 has been considered. The amendment obviates previously raised

objection, as such this objection is hereby withdrawn.

Response to Arguments

4.   Applicant's arguments filed 22 January 2009, pages 10-21, have been

fully considered but are deemed moot in view of the following new grounds of

rejection as explained here below, necessitated by Applicant's substantial

amendments (i.e., amendment of claims 11 and 16: "... ***broadcasting*** *a general*

interrogation signal from the bus line controller ***over the bus line configuration***

until the reply signal is received from the domestic appliance again... ")

(emphasis added) to the claims which significantly affected the scope thereof.

A) Applicant alleges on page 14 of remarks, that Swales et al. (US

2006/0031488) (referred herein after as Swales) specifically teaches that the

choice of *unicasting* the interrogation signal rather than *broadcasting* the

interrogation signal is important in large networks (referring to par [0114] of

Swale). *Thus, any attempts to modify the teachings of Swales to provide*

the ARP requests of Swales as a broadcast, rather than a unicast would

impermissibly destroy the very clear teachings of the Swales reference

(emphasis added).

As to argument **A)** above, the arguments have been fully considered but

they are not persuasive. Examiner disagrees that in *modifying the teachings of*

Swales to provide the ARP requests of Swales as a broadcast, rather than a

unicast would impermissibly destroy the very clear teachings of the Swales

reference (emphasis added). Swales does teach the capability of *broadcasting*

ARP requests (e.g., the Supervisor 200 issues a broadcast ARP request, see par

[0108]). It is also further argued by the Examiner, that the term "unicast" is

formed in analogous to the term "broadcast" which means transmitting to all

destinations on a network, which can negatively leads to excessive use of

broadcast traffic (also known as, "bandwidth") as suggested by Swales.

Therefore, although Swales chooses to use "unicast" rather than "broadcast" in

sending the ARP requests to preserve bandwidth, it does not inherently mean

that the Swales system cannot teach and/or be modified to "broadcast" the ARP

requests. In any case, as stated in the Office Action below, the combined

teachings of Aisa and Swales teach wherein the controller has the capability of

broadcasting signals (ARP request 210) to the domestic appliances (target unit 220), (Aisa: par [0108]), the combined teachings of Aisa and Swales do not explicitly teach the steps wherein the *__general interrogation signal__* is being *__broadcasted__* to the domestic appliances *__from a bus line__* controller, wherein the bus line controller (supervisor 200) is being implemented on a *__bus line configuration__* (emphasis added).

However, Hesse in a similar field of endeavor discloses a CAN communication for building automation systems including the steps wherein a general signals are being *__broadcasted__* to the domestic appliances (controlled devices) *__from a bus line__* controller (control device 110), wherein the bus line controller is being implemented on a *__bus line configuration__* (CAN bus 130) (emphasis added) (pars [0054-0056], and *see* fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teachings of Aisa and Swales with the teachings of Hesse in order to implement the interoperability between a controller and domestic appliances by implementing a "plug-type" configuration such as a bus line configuration. One of ordinary skill in the art at the time the invention was made would have been motivated to combine all of the teachings of Aisa/Swales/Hesse in order to accurately monitor the domestic appliances in a bus line configuration.

B) Applicant alleges on pages 15-21 of remarks, that Swales does not teach or suggest the limitations:

1) repeated polling of a domestic appliance being triggered by a change in **state** of the domestic appliance.

2) the execution of a search operation for a non-responding appliance, including the step of transmitting a current valid state of the formerly non-responding domestic appliance to the bus controller. (emphasis added)

As to argument **B)** above, the arguments have been fully considered but they are not persuasive.

Regarding parts **1)** of argument **B)** above, Applicant is reminded that arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Therefore, Examiner agrees that Swales, individually, does not teach or suggest the limitation of: repeated polling of a domestic appliance being triggered by a change in **state** of the domestic appliance. However, Aisa does teach this limitation (col.4, lines 51-61, col.7, lines 63-67, and col.8, lines 1-7) as discussed in the Office Action below.

Regarding part **2)** of argument **B)** above, Applicant's arguments with respect to part **2)** of argument **B)** have been considered but are moot in view of the new ground(s) of rejection in view of the newly discovered reference: Choi et al. (referred herein after as Choi) as discussed in Office Action below.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Aisa (US 6,853,291) in further view of Swales and in further view of Hesse

et al. (US 2006/0095146) (referred herein after as Hesse).

Regarding Claim 11, Aisa teaches a method for determining an

interruption (e.g., improper operating condition, col.7, lines 63-67, col.8, lines 1-7)

of a communication connection between a domestic appliance (household

appliances C) connected in a local area network (network R) to which further

domestic appliances (household appliances C) are connected (e.g., household

appliances C, indicates as a whole a set of house hold appliances belonging to

the same household environment (e.g., LAN), col.3, lines 39-46, col.9, lines 28-

46, and see fig.1), and a bus line arrangement (col.3, lines 35-46, col.4, lines 43-

50, and see fig.1) comprising a bus line controller (e.g., device F, col.4, lines 16-

43, and see fig.1) comprising the steps of:

transmitting information to the bus line controller about an appliance status

of the domestic appliance (col.4, lines 51-61);

allocating the domestic appliance a unique address for identification (each

appliance is identified with a well determined address, col.9, lines 28-46) of the

domestic appliance in the local area network (e.g., the functionality that device 7,

can display the requested parameters of a selected/specific device on request,

further solidifies that each domestic appliance has a unique address for

identification, col.5, lines 51-67, col.6, lines 1-4, and col.7, lines 48-54, 61-63).

repeatedly requesting a specific fixed criterion of the domestic appliance

(wherein repeatedly requesting a specific fixed criterion is being interpreted as,

repeatedly requesting for an ON or OFF status of an appliance, in order to

determine if the communication connection exists with the relevant domestic

appliance and said bus line controller, see par [0011] of Applicant's disclosure)

over time (e.g., time to time, periodically, and/or automatically) by the bus line

controller if the information includes change information on the appliance status

(col.7, lines 63-67,48-54, col.8, lines 1-7 and lines 25-53).

transmitting a reply signal (wherein a reply signal is being interpreted as a

notification from the relevant domestic appliance to the bus controller, of it's ON

or OFF status, see par [0011] of Applicant's disclosure) from the domestic

appliance to the bus line controller if the communication connection exists

between the domestic appliance and the bus line controller, (col.4, lines 51-61,

col.7, lines 63-67, and col.8, lines 1-7).

Although, the device 7 in the teachings of Aisa could be programmed to interpret a variety of likely improper behaviors (col.5, lines 48-50), the teachings of Aisa do not explicitly teach wherein:

an absence of the reply signal being interpreted as an interruption of the communication connection with the domestic appliance resulting in a performance of a search operation for the domestic appliance, the search operation including the steps of:

broadcasting a general interrogation signal from a bus line controller over the bus line configuration until the reply signal is received from the domestic appliance again; and

subsequently transmitting further information corresponding to a then valid current status of the domestic appliance to the bus line controller.

However, Swales in a similar field of endeavor discloses an automatic determination of correct IP address for network-connected devices including the step wherein an absence (no) of a reply signal (ARP response 230) being interpreted as an interruption of a communication connection with a domestic appliance (target unit 220) (if there is no ARP response 230 sent by the target unit 200 to the supervisor 200's ARP request 210, this is an indication that the target unit 220 is down or failed) resulting in a performance of a search operation for the domestic appliance (pars [0074], [0079-0080], [0106-0108], [0110-0112], [0115], and see fig.5) the search operation including the steps of:

unicasting a general interrogation signal from a bus line controller

(supervisor 200) to the domestic appliance (target unit 220) until the reply signal

is received from the domestic appliance again (pars [0079-0080], [0110-0112],

[0115]); and

subsequently transmitting further information corresponding to a then valid

current status of the domestic appliance to the bus line controller (pars [0115]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to utilize the teachings of Swales into the teachings of Aisa

in order to properly pinpoint what device has lost connection to the bus line

configuration. One of ordinary skill in the art at the time the invention was made

would have been motivated to combine the teachings of Aisa and Swales in

order to optimize the management of the short-term and long-term interruptions

of the devices.

Although, the combined teachings of Aisa and Swales teach wherein the

controller has the capability of broadcasting signals (ARP request 210) to the

domestic appliances (target unit 220), (Aisa: par [0108]), the combined teachings

of Aisa and Swales do not explicitly teach the steps wherein the **_general_**

interrogation signal is being **_broadcasted_** to the domestic appliances **_from_** a

bus line controller, wherein the bus line controller (supervisor 200) is being

implemented on a **_bus line configuration_** (emphasis added).

However, Hesse in a similar field of endeavor discloses a CAN

communication for building automation systems including the steps wherein a

general signals are being **_broadcasted_** to the domestic appliances (controlled

devices) *__from__* a *__bus line__* controller (control device 110), wherein the bus line

controller is being implemented on a *__bus line configuration__* (CAN bus 130)

(emphasis added) (pars [0054-0056], and *see* fig.1).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combined teachings of Aisa and Swales with

the teachings of Hesse in order to implement the interoperability between a

controller and domestic appliances by implementing a "plug-type" configuration

such as a bus line configuration. One of ordinary skill in the art at the time the

invention was made would have been motivated to combine all of the teachings

of Aisa/Swales/Hesse in order to accurately monitor the domestic appliances in a

bus line configuration

Regarding Claim 12, the combined teachings of Aisa/Swales/Hesse teach

the method according to claim 11 as described above. The combined teachings

of Aisa/Swales/Hesse further teach wherein requesting the specific fixed criterion

of the domestic appliance cyclically (wherein the term "cyclically" hereinafter is

being interpreted as recurring or moving in cycles) (Aisa: col.8. lines 25-39).

Regarding Claim 13, the combined teachings of Aisa/Swales/Hesse teach

the method according to claim 11 as described above. The combined teachings

of Aisa/Swales/Hesse further teach wherein the appliance status is the specific

fixed criterion of the domestic appliance (Aisa: col.7, lines 63-67, 48-54 and col.8.

lines 25-39).

Regarding Claim 16, Aisa teaches a device (device 7) for determining an

interruption (e.g., improper operating condition, col.7, lines 63-67, col.8, lines 1-7)

of a communication connection between a domestic appliance (household

appliances C) connected in a local area network (network R) to which further

domestic appliances are connected (e.g., household appliances C, indicates as a

whole a set of house hold appliances belonging to the same household

environment (e.g., LAN, col.3, lines 39-46, col.9, lines 28-46, and *see* fig.1), the

device comprising:

a bus line configuration having a bus line controller said bus line controller

receiving information pertaining to an appliance status of the domestic appliance

(col.3, lines 35-46, col.4, lines 43-50, and *see* fig.1);

said bus line controller programmed to allocate a unique address for

identifying (each appliance is identified with a well determined address, col.9,

lines 28-46) the domestic appliance in the local area network (e.g., the

functionality that device 7, can display the requested parameters of a

selected/specific device on request, further solidifies that each domestic

appliance has a unique address for identification, col.5, lines 51-67, col.6, lines 1-

4, and col.7, lines 48-54, 61-63);

said bus line controller programmed to repeatedly request over time a

specified fixed criterion of the domestic appliance (wherein repeatedly requesting

a specific fixed criterion is being interpreted as, repeatedly requesting for an ON

or OFF status of an appliance, in order to determine if the communication

connection exists with the relevant domestic appliance and said bus line controller, *see* par [0011] of Applicant's disclosure) when the information transmitted contains change information from the domestic appliance regarding the appliance status (col.7, lines 63-67,48-54, col.8, lines 1-7 and lines 25-53);

said bus line controller configured such that in a presence of the communication connection to the domestic appliance, said bus line controller receiving a reply signal from the domestic appliance (wherein a reply signal is being interpreted as a notification from the relevant domestic appliance to the bus controller, of it's ON or OFF status, *see* par [0011] of Applicant's disclosure) (col.4, lines 51-61).

Although, the device 7 in the teachings of Aisa could be programmed to interpret a variety of likely improper behaviors (col.5, lines 48-50), the teachings of Aisa do not explicitly teach wherein:

an absence of the reply signal, said evaluation device providing a message signal indicating an interruption of the communication connection to the domestic appliance;

and said bus line controller being constructed so that in response to the message signal, said bus line controller carries out a search operation for the domestic appliance wherein said bus line controller broadcasts a general interrogation signal over the bus line configuration until the reply signal is obtained from the domestic appliance again, and

said bus line controller is further constructed such that said bus line

controller then allows information corresponding to a then valid current appliance

status to be received including the steps of:

broadcasting a general interrogation signal from a bus line controller over

the bus line configuration until the reply signal is received from the domestic

appliance again; and

subsequently transmitting further information corresponding to a then valid

current status of the domestic appliance to the bus line controller.

However, Swales in a similar field of endeavor discloses an automatic

determination of correct IP address for network-connected devices including the

step wherein an absence (no) of a reply signal (ARP response 230), an

evaluation device (supervisor 200) providing a message signal indicating an

interruption of a communication connection with a domestic appliance (target unit

220) (if there is no ARP response 230 sent by the target unit 200 to the

supervisor 200's ARP request 210, this is an indication that the target unit 220 is

down or failed) and said controller being constructed so that in response to the

message signal, said controller carries out a search operation for the domestic

appliance (pars [0074], [0079-0080], [0106-0108], [0110-0112], [0115], and see

fig.5) wherein said controller unicasts a general interrogation signal until the reply

signal is obtained from the domestic appliance again, and said controller is

further constructed such that said controller then allows information

corresponding to a then valid current appliance status to be received (pars [0079-

0080], [0110-0112], [0115]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to utilize the teachings of Swales into the teachings of Aisa

in order to properly pinpoint what device has lost connection to the bus line

configuration. One of ordinary skill in the art at the time the invention was made

would have been motivated to combine the teachings of Aisa and Swales in

order to optimize the management of the short-term and long-term interruptions

of the devices.

Although, the combined teachings of Aisa and Swales teach wherein the

controller has the capability of broadcasting signals (ARP request 210) to the

domestic appliances (target unit 220), (Aisa: par [0108]), the combined teachings

of Aisa and Swales do not explicitly teach the steps wherein the ***general***

interrogation signal is being ***broadcasted*** to the domestic appliances ***from*** a

bus line controller, wherein the bus line controller (supervisor 200) is being

implemented on a ***bus line configuration*** (emphasis added).

However, Hesse in a similar field of endeavor discloses a CAN

communication for building automation systems including the steps wherein a

general signals are being ***broadcasted*** to the domestic appliances (controlled

devices) ***from*** a ***bus line*** controller (control device 110), wherein the bus line

controller is being implemented on a ***bus line configuration*** (CAN bus 130)

(emphasis added) (pars [0054-0056], and see fig.1).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combined teachings of Aisa and Swales with

the teachings of Hesse in order to implement the interoperability between a

controller and domestic appliances by implementing a "plug-type" configuration such as a bus line configuration. One of ordinary skill in the art at the time the invention was made would have been motivated to combine all of the teachings of Aisa/Swales/Hesse in order to accurately monitor the domestic appliances in a bus line configuration.

Regarding Claim 17, the combined teachings of Aisa/Swales/Hesse teach the device according to claim 16, as described above. The combined teachings of Aisa/Swales/Hesse further teach wherein said bus line controller is a controller which cyclically requests the specified fixed criterion of the domestic appliance (Aisa: col.8. lines 25-39).

Regarding Claim 18, the combined teachings of Aisa/Swales/Hesse teach the device according to claim 16 as described above. The combined teachings of Aisa/Swales/Hesse further teach wherein said bus line controller is a controller which cyclically repeatedly requests the appliance status of the domestic appliance (Aisa: col.7, lines 63-67,48-54, col.8, lines 1-7 and lines 25-53).

Regarding Claim 14, the combined teachings of Aisa/Swales/Hesse teach the method according to claim 11 as described above. The combined teachings of Aisa/Swales/Hesse further teach wherein carrying out the search operation cyclically (Swales: pars [0074], [0079-0080], [0106-0108], [0110-0112], [0115], and see figs.5 and 7).

Regarding Claim 15, the combined teachings of Aisa/Swales/Hesse teach

the method according to claim 11 as described above. The combined teachings

of Aisa/Swales/Hesse further teach the step wherein transmitting a current status

of the domestic appliance to the bus line controller only after the domestic

appliance has been allocated the unique address in the local area network via a

registration procedure (pars [0099], [0106-0108], [0115-0117], and [0123]).

Regarding Claim 19, the combined teachings of Aisa/Swales/Hesse teach

the device according to claim 16 as described above. The combined teachings of

Aisa/Swales/Hesse further teach the step wherein said bus line controller is a

controller which cyclically carries out the search operation (Swales: pars [0074],

[0079-0080], [0106-0108], [0110-0112], [0115], and see fig.5).

Regarding Claim 20, the combined teachings of Aisa/Swales/Hesse teach

the device according to claim 16 as described above. The combined teachings of

Aisa/Swales/Hesse further teach the step wherein said bus line controller is

configured such that before receiving the appliance status of the domestic

appliance, said bus line controller performs a registration procedure by which the

domestic appliance obtains the unique address in the local area network by

which it can be reached in the local area network (Swales: pars [0074], [0079-

0080], [0106-0108], [0110-0112], [0115], and see figs.5 and 7).

7.   Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Aisa in further view of Swales in further view of Choi and in further view of

Hesse.

Regarding Claim 21, Aisa teaches a method for determining an

interruption (e.g., improper operating condition, col.7, lines 63-67, col.8, lines 1-7)

of a communication connection between a domestic appliance (household

appliances C) connected in a local area network (network R) to which further

domestic appliances (household appliances C) are connected (e.g., household

appliances C, indicates as a whole a set of house hold appliances belonging to

the same household environment (e.g., LAN), col.3, lines 39-46, col.9, lines 28-

46, and see fig.1), and a bus line arrangement (col.3, lines 35-46, col.4, lines 43-

50, and see fig.1) comprising a bus line controller (e.g., device F, col.4, lines 16-

43, and see fig.1) comprising the steps of:

transmitting information to the bus line controller about a state of the

domestic appliance (col.4, lines 51-61, col.7, lines 63-67, and col.8, lines 1-7);

allocating the domestic appliance a unique address for identification (each

appliance is identified with a well determined address, col.9, lines 28-46) of the

domestic appliance in the local area network (e.g., the functionality that device 7,

can display the requested parameters of a selected/specific device on request,

further solidifies that each domestic appliance has a unique address for

identification, col.5, lines 51-67, col.6, lines 1-4, and col.7, lines 48-54, 61-63).

repeatedly requesting a specific fixed criterion of the domestic appliance

(wherein repeatedly requesting a specific fixed criterion is being interpreted as,

repeatedly requesting for an ON or OFF status of an appliance, in order to

determine if the communication connection exists with the relevant domestic

appliance and said bus line controller, see par [0011] of Applicant's disclosure)

over time (e.g., time to time, periodically, and/or automatically) by the bus line

controller if the information indicates a change in the status of the appliance

(col.7, lines 63-67,48-54, col.8, lines 1-7 and lines 25-53).

transmitting a reply signal (wherein a reply signal is being interpreted as a

notification from the relevant domestic appliance to the bus controller, of it's ON

or OFF status, see par [0011] of Applicant's disclosure) from the domestic

appliance to the bus line controller if the communication connection exists

between the domestic appliance and the bus line controller, (col.4, lines 51-61).

Although, the device 7 in the teachings of Aisa could be programmed to

interpret a variety of likely improper behaviors (col.5, lines 48-50), the teachings

of Aisa do not explicitly teach wherein:

an absence of the reply signal being interpreted as an interruption of the

communication connection with the domestic appliance resulting in a

performance of a search operation for the domestic appliance, the search

operation including the steps of:

transmitting a general interrogation signal from a bus line controller over

the bus line configuration until the reply signal is received from the domestic

appliance again.

However, Swales in a similar field of endeavor discloses an automatic determination of correct IP address for network-connected devices including the step wherein an absence (no) of a reply signal (ARP response 230) being interpreted as an interruption of a communication connection with a domestic appliance (target unit 220) (if there is no ARP response 230 sent by the target unit 200 to the supervisor 200's ARP request 210, this is an indication that the target unit 220 is down or failed) resulting in a performance of a search operation for the domestic appliance (pars [0074], [0079-0080], [0106-0108], [0110-0112], [0115], and see fig.5) the search operation including the steps of:

transmitting a general interrogation signal from a bus line controller (supervisor 200) to the domestic appliance (target unit 220) until the reply signal is received from the domestic appliance again (pars [0079-0080], [0108], [0110-0112], and [0115]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Swales into the teachings of Aisa in order to properly pinpoint what device has lost connection to the bus line configuration. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Aisa and Swales in order to optimize the management of the short-term and long-term interruptions of the devices.

In further, the combined teachings of Swales and Aisa do not explicitly teach the step of:

subsequently transmitting further information corresponding to *a then*

valid current state of the domestic appliance to the bus line controller

(emphasis added).

However, Choi in a similar field of endeavor discloses a system and

method for controlling devices in a home environment including the step of:

subsequently transmitting further information corresponding to *a then*

valid current state (updated and/or changed status) of the domestic appliance

to the bus line controller (col.2, lines 38-64, col.5, lines 7-11, and col.5, lines 31-

43).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to utilize the teachings of Choi in the combined teachings of

Aisa and Swales to be able to provide the controller device with valid status

information from the controlled devices. One of ordinary skilled in the art at the

time the invention was made would have been motivated to combine the

teachings of Aisa/Swales/Choi to minimize overhead by only outputting the data

for those appliances whose status has been changed or updated.

Although, the combined teachings of Aisa/Swales/Choi teach wherein the

controller has the capability of broadcasting signals (ARP request 210) to the

domestic appliances (target unit 220), (Aisa: par [0108]), the combined teachings

of Aisa and Swales do not explicitly teach the step wherein the bus line controller

(supervisor 200) is being implemented on a *bus line configuration* (emphasis

added).

However, Hesse in a similar field of endeavor discloses a CAN communication for building automation systems including the step wherein the bus line controller is being implemented on a ***bus line configuration*** (CAN bus 130) (emphasis added) (pars [0054-0056], and *see* fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teachings of Aisa/Swales/Choi with the teachings of Hesse in order to implement the interoperability between a controller and domestic appliances by implementing a "plug-type" configuration such as a bus line configuration. One of ordinary skill in the art at the time the invention was made would have been motivated to combine all of the teachings of Aisa/Swales/Choi/Hesse in order to accurately monitor the domestic appliances in a bus line configuration.

Regarding Claim 22, this method claim comprises limitation(s) substantially the same, as those discussed on claim 12 above, same rationale of rejection is applicable.

Regarding Claim 23, this method claim comprises limitation(s) substantially the same, as those discussed on claim 13 above, same rationale of rejection is applicable.

Regarding Claim 24, this method claim comprises limitation(s) substantially the same, as those discussed on claim 14 above, same rationale of rejection is applicable.

Regarding Claim 25, this method claim comprises limitation(s) substantially the same, as those discussed on claim 15 above, same rationale of rejection is applicable.

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Examiner has cited particular paragraphs, columns, and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially

teaching all or part of the claimed invention, as well as the context of the passage

as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to ANTHONY MEJIA whose telephone number

is (571)270-3630. The examiner can normally be reached on Mon-Thur 9:30AM-

8:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John Follansbee can be reached on 571-272-3964. The

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

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Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/A.M./
Patent Examiner, Art Unit 2451
/Salad Abdullahi/

Primary Examiner, Art Unit 2457